

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

DOCKET	
98-AFC-1C	
DATE	MAY 23 2007
RECD.	MAY 29 2007

In the Matter of:**Los Medanos Energy Center****Los Medanos Energy Center, LLC****Docket No. 98-AFC-1C****Order No. 07-0523-4****ORDER APPROVING** a Petition to Lower the
Annual PM10 Emissions Limit for the Facility

Los Medanos Energy Center, LLC, the owner/operator of Los Medanos Energy Center, has requested to modify the language in Air Quality (AQ) Conditions 21(h), 32(d) and 33(d). The modifications will reflect the correct hourly, daily and annual PM10 emission limits for the facility. The modifications will also allow the project owner to obtain a refund of emission reduction credits for particulate matter less than ten microns (PM10) from the Bay Area Air Quality Management District for the reduction in PM10 emissions.

The modifications were approved by Bay Area Air Pollution Control District and a revised Permit to Operate was issued on January 30, 2007.

STAFF RECOMMENDATION

The Energy Commission staff reviewed the petition and finds that it complies with the requirements of Title 20, Section 1769(a) of the California Code of Regulations and recommends approval of the Los Medanos Energy Center, LLC petition to modify the Commission Decision Conditions of Certification AQ-21(h), -32(d) and -33(d).

ENERGY COMMISSION FINDINGS

Based on staff's analysis, the Energy Commission concludes that the proposed changes will not result in any significant impact to public health and safety, or the environment. The Energy Commission finds that:

- o The petition meets all the filing criteria of Title 20, section 1769(a) of the California Code of Regulations concerning post-certification project modifications;
- o The modifications will not change the findings in the Energy Commission's Final Decision pursuant to Title 20, section 1755;
- o The project will remain in compliance with all applicable laws, ordinances, regulations, and standards, subject to the provisions of Public Resources Code section 25525;

- The change will be beneficial to the project owner because the amended conditions will reflect the correct PM10 emissions limits and allow the project owner to obtain a refund of excess emission reduction credits from the District.
- There has been a substantial change in circumstances since the Energy Commission certification justifying the change and that the change is based on information that was not available to the parties prior to Energy Commission certification in that the information justifying the lowering of the PM10 emission limit was the result of source tests conducted over the past five years of operation.

CONCLUSION AND ORDER

The California Energy Commission hereby adopts Staff's recommendations and approves the following changes to the Los Medanos Energy Center Project's Decision. New language is shown **double-underlined and bolded**, and deleted language is shown in ~~strikeout~~.

CONDITION(S) OF CERTIFICATION

AQ-21. The owner/operator of the Gas Turbines (S-1 and S-3) and HRSGs (S-2 and S-4) shall meet all of the requirements listed in (a) through (h) below, except during a Gas Turbine Start-up or a Gas Turbine Shutdown. (BACT, PSD, and Toxic Risk Management Policy)

- (a) Nitrogen oxide emissions at P-1 (the combined exhaust point for the S-1 Gas Turbine and the S-2 HRSG after control by the A-1 SCR System and A-2 Oxidation Catalyst) shall not exceed 20.0 pounds per hour, calculated as NO₂, nor 0.009 lbs/MMBTU of natural gas fired. Nitrogen oxide emissions at P-2 (the combined exhaust point for the S-3 Gas Turbine and the S-4 HRSG after control by the A-3 SCR System and A-4 Oxidation Catalyst) shall not exceed 20.0 pounds per hour, calculated as NO₂, nor 0.009 lbs/MMBTU of natural gas fired. (PSD for NO_x)
- (b) The nitrogen oxide concentration at P-1 and P-2 each shall not exceed 2.5 ppmv, corrected to 15% O₂, on a dry basis, averaged over any 1-hour period. (BACT for NO_x)
- (c) Carbon monoxide emissions at P-1 and P-2 each shall not exceed 29.2 pounds per hour, or 0.0132 lb/MMBTU of natural gas fired. (PSD for CO)
- (d) The carbon monoxide concentration at P-1 and P-2 each shall not exceed 6 ppmv, corrected to 15% O₂, on a dry basis, averaged over any rolling 3-hour period. (BACT for CO)
- (e) Ammonia (NH₃) emissions at P-1 and P-2 each shall not exceed 10 ppmv, corrected to 15% O₂, on a dry basis, averaged over any rolling 3-hour period. This ammonia emission concentration shall be verified by the continuous records of the ammonia injection rate to A-1 and A-3 SCR Systems. The correlation between the gas turbine and HRSG heat input rates, A-1 and A-3 SCR System ammonia injection rates, and corresponding ammonia emission concentration at emission points P-1 and P-2 shall be determined in accordance with permit condition 38. (TRMP for NH₃)
- (f) Precursor organic compound (POC) emissions at P-1 and P-2 each shall not exceed 3.8 pounds per hour, nor 0.0017 lb/MMBTU of natural gas fired. (BACT)
- (g) Sulfur dioxide (SO₂) mass emissions at P-1 and P-2 each shall not exceed 6.2 pounds per hour or 0.00277 lb/MMBTU of natural gas fired. (BACT)

- (h) Particulate matter (PM₁₀) mass emissions at P-1 and P-2 each shall not exceed ~~16.3~~ 9 pounds per hour or ~~0.0073~~ 0.0040 lb/MMBTU of natural gas fired. (BACT)

Verification: As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date, time, and duration of any violation of this Condition. The owner/operator shall also include quantitative information on the severity of the violation.

AQ-32 . Total combined emissions from the Gas Turbines, HRSGs, and Auxiliary Boiler (S-1, S-2, S-3, S-4, and S-5), including emissions generated during Gas Turbine Start-ups, Gas Turbine Shutdowns, Auxiliary Boiler Start-ups, and Auxiliary Boiler Shutdowns, shall not exceed the following limits during any calendar day:

- | | | |
|-----|---|--------|
| (a) | 1,342 pounds of NO _x (as NO ₂) per day | (CEQA) |
| (b) | 6,445 pounds of CO per day | (PSD) |
| (c) | 271.3 pounds of POC (as CH ₄) per day | (CEQA) |
| (d) | 742 <u>465</u> pounds of PM ₁₀ per day | (PSD) |
| (e) | 282.6 pounds of SO ₂ per day | (BACT) |

Verification: As part of the semiannual Air Quality Reports, the owner/operator shall indicate the date of any violation of this Condition including quantitative information on the severity of the violation. The reports should also identify the days on which two cold start-ups occurred and the associated maximum emissions.

AQ-33 Cumulative emissions from the Gas Turbines, HRSGs, and the Auxiliary Boiler combined (S-1, S-2, S-3, S-4, and S-5), including emissions generated during Gas Turbine Start-ups, and Gas Turbine Shutdowns, shall not exceed the following limits during any consecutive twelve-month period:

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|-----|---|-----------------------|
| (a) | 175.7 tons of NO _x (as NO ₂) per year | (Offsets, PSD) |
| (b) | 506.4 tons of CO per year | (Cumulative Increase) |
| (c) | 33.9 tons of POC (as CH ₄) per year | (Offsets) |
| (d) | 131.6 <u>69.2</u> -tons of PM ₁₀ per year | (Offsets, PSD) |
| (e) | 47.11 tons of SO ₂ per year | (Cumulative Increase) |

Verification: As part of the Air Quality Reports, the owner/operator shall include information on the date after which these annual limits were exceeded.

IT IS SO ORDERED.

Date: May 23, 2007

STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION



JACKALYNE PFANNENSTIEL, Chair